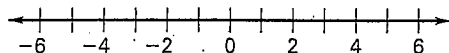


# Chapter Test B

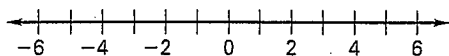
For use after Chapter 2

Graph the numbers on a number line.

1.  $-0.6$  and  $2.1$



2.  $\frac{3}{10}$  and  $-\frac{4}{9}$



Write the numbers in increasing order.

3.  $1.5, -2.4, 2.1, -1.6, 3.3$

4.  $2\frac{5}{9}, 2.5, -1.25, -1\frac{1}{5}, -1\frac{2}{9}$

Find the value of the expression.

5.  $|-4.2| - 6.5$

6.  $-8 + 6 + (-9)$

7.  $-4.5 - (-6.2) + 1.7$

8.  $(-1.7) + |-5.8 - 6.2|$

9.  $16.23 - (-14.2) + 9.3$

10.  $|2 - (-1) + 4|$

11. A telemarketing company had a loss of \$2113.15 in July, a loss of \$597.11 in August, and a profit of \$4121.55 in September. Did the company make a profit during the 3-month period? If so, what was the profit?

Evaluate the expression for the given value of the variable.

12.  $4 + x + (-7) + (-3)$  when  $x = 3$

13.  $-4x^2 - 6$  when  $x = -2$

14.  $2|3x - 5|$  when  $x = -3$

15.  $|6 - x| + 4$  when  $x = 5$

16.  $\frac{3a - 7}{2}$  when  $a = 4$

17.  $\frac{a + 3b}{5}$  when  $a = -3$  and  $b = 4$

Add the matrices.

18.  $\begin{bmatrix} -7 & 1 & 2 \\ 9 & -21 & 5 \\ -10 & 8 & 10 \end{bmatrix} + \begin{bmatrix} -8 & -11 & 1 \\ 12 & -4 & -1 \\ -2 & -10 & -9 \end{bmatrix}$

## Answers

1. Use number line at left.

2. Use number line at left.

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. Use space at left.

# Chapter Test B

For use after Chapter 2

Subtract the matrices.

19.  $\begin{bmatrix} -1 & 7 \\ 11 & 6 \\ -2 & 15 \end{bmatrix} - \begin{bmatrix} -6 & -9 \\ -3 & 4 \\ 0 & 1 \end{bmatrix}$

Find the values of  $a$ ,  $b$ ,  $c$ , and  $d$ .

20.  $\begin{bmatrix} 5a & 3b \\ c+2 & d \end{bmatrix} = \begin{bmatrix} -50 & 12 \\ -17 & 22 \end{bmatrix}$

21.  $\begin{bmatrix} 2a & 7b \\ 6c & -3d \end{bmatrix} = \begin{bmatrix} 24 & 21 \\ 18 & -15 \end{bmatrix}$

Find the product or quotient.

22.  $(-6)(-\frac{3}{2})(7)(-11)$

23.  $-16.2 \div 6$

24.  $(-4)(\frac{9}{10})(-5)(-3)$

25.  $-48 \div (\frac{6}{5})$

Simplify the expression.

26.  $(-4)(-x)(x^2)$

27.  $(24)(-5x)(-x)$

28.  $-x(4 - x)$

29.  $-4t(t + 2)$

30.  $b^2(4 - b^2)$

31.  $(c + 3c^2)(-c^2)$

32.  $3y - (6y + 2)(-y)$

33.  $(-7x + x^2)(-x) + x^2$

34.  $\frac{3y}{2} \div \frac{3}{7}$

35.  $-\frac{x}{4} \div \frac{6}{x}$

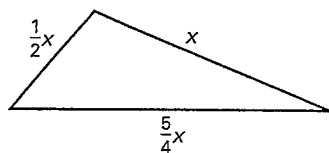
36.  $\frac{-10x + 3}{5}$

37.  $\frac{17x - 6}{2}$

38. You randomly choose an integer from 0 to 9. What are the odds that the integer is 3 or more?

39. You toss three coins. What is the probability  $P$  that all are heads?

40. Write and simplify an expression for the perimeter of the figure.



19. Use space at left.

20. \_\_\_\_\_

21. \_\_\_\_\_

22. \_\_\_\_\_

23. \_\_\_\_\_

24. \_\_\_\_\_

25. \_\_\_\_\_

26. \_\_\_\_\_

27. \_\_\_\_\_

28. \_\_\_\_\_

29. \_\_\_\_\_

30. \_\_\_\_\_

31. \_\_\_\_\_

32. \_\_\_\_\_

33. \_\_\_\_\_

34. \_\_\_\_\_

35. \_\_\_\_\_

36. \_\_\_\_\_

37. \_\_\_\_\_

38. \_\_\_\_\_

39. \_\_\_\_\_

40. \_\_\_\_\_